

Daily Report

Yuxin Ma

06.20.2013

Intro

For today's Annual Academic Conference, I only read [1] which was planned yesterday.

Reading

In [1], the authors described a system called **imMens** that supports large-scale data visualization on web browsers. They developed methods for “real-time visual querying” including precomputing multivariate data tiles and parallelizing data processing and rendering with WebGL and GPU. The visual methods provided in this paper was binned plot and data cube. In the binned plot, the data tile of different resolution will be precomputed first and stored as image. When the user requested a specific resolution, it is easy to display the data by just showing the image. This paper also presented many technical details about how the data tiles are computed and stored, and how the result is rendered on the webpage with WebGL. The technics here might be useful for our Attic Framework as a reference to resolve the performance issue, especially by using WebGL.

Plan for Tomorrow

- Finish [2].

References

- [1] Z. Liu, B. Jiang, and J. Heer, “imMens: Real-time Visual Querying of Big Data,” in *EuroVis 2013*, 2013.
- [2] J. Chuang, S. Gupta, C. D. Manning, and J. Heer, “Topic Model Diagnostics: Assessing Domain Relevance via Topical Alignment,” in *ICML 2012*, 2012.